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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,634	02/26/2002	Albert Modl	MODL3001/JEK	5404

23364 7590 08/25/2005

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EXAMINER

AKHAVANNIK, HADI

ART UNIT PAPER NUMBER

2621

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/926,634	Applicant(s) MODL ET AL.	
	Examiner Hadi Akhavannik	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 16-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/26/02</u> | 6) <input type="checkbox"/> Other: ____ |

Drawings

1. The drawings are objected to because they lack descriptive label. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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2. Claims 17-22, 24, and 31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Referring to claims 17, and 18 the phrase "wherein at least two different algorithms are used to convert said biometric data from the sensor into said comparative data" is not sufficiently supported by the applicant's specification. More specifically, the applicant's specification is non-enabling in regards determining the specific nature of the algorithms. For example, the applicant's specification (pages 10-14, more specifically page 13) does not disclose how at least two algorithms are used to convert the biometric data into comparative data. Further, the claim appears to indicate that a single sensor detects multiple types of biometrics. This is not disclosed in the specifications. Therefore, one in ordinary skill in the art would have been burdened by undue experimentation or delay to make or use the claimed invention.

The office is interpreting the above claim to mean that there is one algorithm to interpret the biometric data taken from the sensor and one algorithm to make the biometric data into comparative data.

A similar rejection is applicable to claim 24.

Claims 19-22 and 31 are rejected because they are dependent on rejected claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 16-18, 21-31, and 33 are rejected under 35.U.S.C.102(b) as being anticipated by Piosenka et al (US 4993068 referred to as "Piosenka" herein).

Regarding claim 16, Piosenka discloses a portable data carrier capable of authentication by means of biometric data (figure 3b and column 11 lines 10-42 discloses a portable medium that contains biometric data which is used for authentication), comprising a memory in which at least two sets of biometric reference data are stored (column 11 lines 33-35 disclose two sets of biometric data), and wherein the different sets of reference data are generated from biometric data of a biometric feature using different algorithms (figure 3a items 108-109 and column 10 line 62 to column 11 line 9 discloses public key techniques that can encrypt data on to the memory medium. Each public key would require a different algorithm. Also, if the claim is interpreted to require a different algorithm for each type of biometric then inherently biometrics such as fingerprint and voice are acquired and processed differently).

Regarding claim 17, Piosenka discloses a terminal for authentication by means of biometric data comprising a sensor arranged to detect at least one biometric feature (figure 1 and figure 2 and column 4 lines 55-66 disclose a

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terminal with many sensors), an I/O device for transferring data (column 5 lines 28-30 discloses that the information is transmitted to the computer), and a control and data processing unit which is arranged to convert biometric data from the sensor which were derived from the at least one detected biometric feature into comparative data by an algorithm (column 5 lines 30-51 disclose that the biometric data is converted to a composite data set which is used as comparative data), wherein at least two different algorithms are used to convert said biometric data from the sensor into said comparative data (column 5 lines 20-51 disclose that the data is transferred to the computer and the data is then modified until it becomes comparative data. This requires at least one algorithm to transfer the data and one algorithm to alter the digitized data into comparative data). Also, see the remarks regarding claim 16 above.

Regarding claims 18, 23-24, Piosenka discloses that the reference data are transferred by the I/O device from the data carrier to the terminal, and wherein the control and data processing unit are arranged to check the reference data for a match with the comparative data (figure 3b and column 11 lines 10-41 disclose that data is transferred from the data carrier and compared against reference data). All other aspects of claim 18 are addressed in the rejection of claim 16 and 17).

Regarding claim 21 and 25, Piosenka discloses that the sets of reference data and the algorithms used for generating the sets of comparative data have a characteristic identification, and wherein reference data and comparative data with the same identification are checked (column 6 lines 15-25 discloses that

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each set of information is given its own key, which functions as the characteristic identification).

Regarding claim 22, 26, 31, and 33, Piosenka discloses that at least one detected biometric feature is selected from the group consisting of iris, retina, face, speech, fingerprints and a signature including the writing dynamics determined during signing (figure 1, figure 2 and column 3 lines 44-60 disclose that the biometric feature is selected from a set of possible features).

Regarding claim 27, Piosenka discloses that several different sets of reference data are derived and stored, and several different sets of comparative data have been converted from detected biometric data, and wherein the several different sets of reference data are compared with the several different sets of comparative data for authentication (figure 3a, figure 3b and column 4 line 55 to column 8 line 70 disclose that several sets of reference data are stored and are compared against several sets of comparative data for authentication).

Regarding claim 28, Piosenka discloses that the different sets of reference data and the different sets of comparative data are derived and converted from biometric data of the same kind which have been converted by different algorithms (column 5 lines 52-64 disclose that each physical characteristic uses a mathematical algorithm and column 6 lines 15-25 discloses that each set of information uses its own unique algorithm due to the key it uses).

Regarding claim 29, Piosenka discloses that the conversion of the different sets of reference data and comparative data starts out from different biometric data, which have been converted by the same or by different

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algorithms (column 5 lines 52-64 disclose that each physical characteristic uses a mathematical algorithm and column 6 lines 15-25 discloses that each set of information uses its own unique algorithm due to the key it uses).

Regarding claim 30, Piosenka discloses that the comparison of several different sets of reference data with several different sets of comparative data, the authentication is decided positively if the majority of comparisons are positive (column 8 lines 23-70 disclose that several sets of data are compared and if even one of the data matches, then the authentication is decided positively).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19, 20, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Piosenka in view of Dunn et al (5987155 referred to as "Dunn" herein).

Piosenka discloses all aspects of claim 19 except he does not disclose the data carrier includes a control and data processing unit arranged to check the reference data for a match with the comparative data.

Dunn discloses that the data carrier includes a control and data processing unit arranged to check the reference data for a match with the

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comparative data (figure 3 and column 7 lines 12-55 disclose that the smart card, which acts as the data carrier, can process biometric data to check for authentication).

It would have been obvious at the time of the invention to one in ordinary skill in the art to combine in Piosenka a data carrier that has a processor that can compare sets of biometric data as taught by Dunn in order to add another layer of security to the identification system and make for a more flexible system. Also, Piosenka already uses a data carrier to store the biometric information (see abstract for explanation). Further, both inventions are from the same field of endeavor of biometric identification.

Regarding claims 20 and 32, the rejection of claim 19 discloses that the portable data carrier is a smart card.

Conclusion

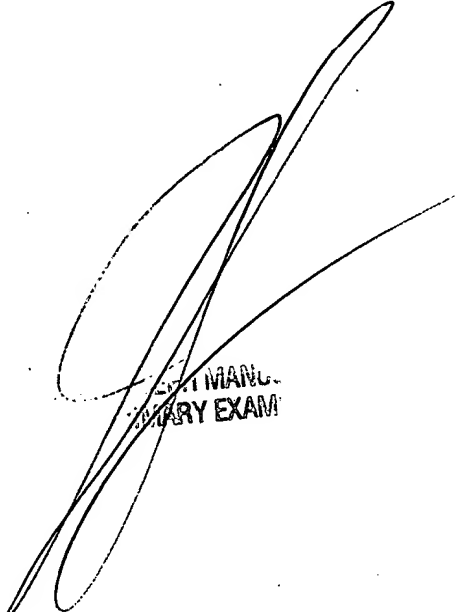
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Drexler et al. (5457747 that discloses an identification system that uses a data carrier), Bellegarda et al. (5502774 which discloses identification using multiple sets of data, Osten et al. (5719950 discloses a biometric system using many sets of data).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hadi Akhavannik whose telephone number is 571-272-8622. The examiner can normally be reached on 10:30-7:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on (571)272-7695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JOSEPH MANCUSO
PRIMARY EXAMINER